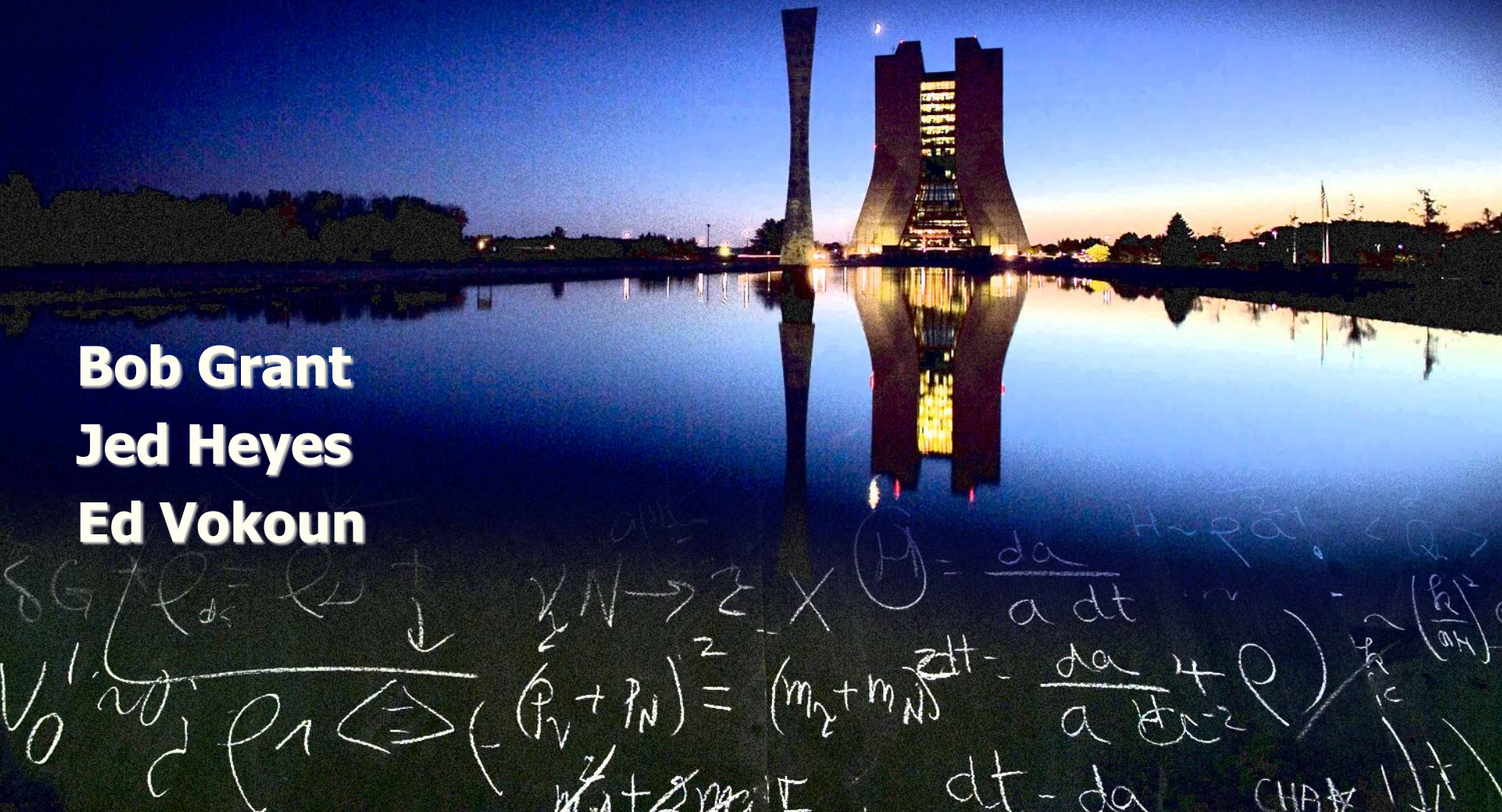


IQA & CA Implementation

July 14, 2011

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Office of Quality and Best Practices

IQA Implementation Status

Quality Assurance Program Implementation

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QA Implementation Status

- ◆ Scientific Research Projects
- ◆ Assessment Program
 - ◆ OQBP QA assessment schedule
 - ◆ Consolidated assessment schedule
 - ◆ Corrective Action Plan tracking
- ◆ Other activities & challenges

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QA Implementation - Project QA Status

◆ Science / Project QA

- ❖ Presentation on QA to management & project teams
 - Head of OPPS, AD Research, AD Accelerator
 - MicroBooNe Working Group Meeting
- ❖ Working with PPD QAR on QA Plans (Minerva, MicroBooNe & Mu2e)
 - Assisting with CD-x Director's & Lehman review readiness QAPs
 - Developing templates, make available to L1, L2 project managers
 - MicroBooNE Cryogenic Engineering QA Plan module , larger QA template
 - Draft QA in projects presentation for project teams – tbd
- ❖ Attending PMGs, WGMs (APUL, DES, LBNE, NoVA, Project X, MicroBooNe & Mu2e)
- ❖ Assessments completed (As-Is, Scientific Publications, EVMS) more planned

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QA Implementation Status – Assessments, Schedule

◆ OQBP QA Assessments

- ❖ FY2010 process based D/S/C & OQBP selected
- ❖ FY2011-2013 - 3 year approach
 - IQA criteria based, lab-wide
 - Includes scientific research, projects & support
 - Individual & summary roll up reports by criteria
 - Flexibility based on D/S/C staff, activities, QAR & QAE availability etc
 - » Accommodate requests ex: order of 2012 from D/S/Cs
 - » Regular progress meetings issues, lessons etc QAE meeting, & QAR meetings
 - CAS requirements as program matures -> 2013
- ❖ FY2014 return to process based D/S/C & OQBP selected assessments
 - Most value to D/S/Cs & most relevant QA criteria

3 Year OQBP Assessment Schedule

2011 Fermilab Independent Assessment Schedule

[illegible]

2012 Fermilab Independent Assessment Schedule

[illegible]

2013 Fermilab Independent Assessment Schedule

[illegible]

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Assessment Program – Fermilab Consolidated 3 Year Schedule

- ◆ Fermilab Consolidated Assessment 3 year schedule
 - ❖ All assessment types FY2010-FY2012
 - Categories of assessment types available to track
 - Management Assessments
 - Independent Assessments (OQBP, ES&H, Third-party such as DOE, ISO, etc)
 - Inspections (HPR, Walkthroughs etc)
 - Drills
 - Surveillances
 - Director's Assessments
 - Special Assessments (for cause)
 - . . . Others mentioned in FAM Chapter 2 Appendix
- ◆ 2010 lists complete, maintenance ongoing, coordinating with QARs
 - Await directive to staff from Sr. Management for 2011-2013
 - QAE staff reduced

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QA Assessment Status

◆ OQBP Assessment Status at a Glance

❖ FY2011 –

- S/CI inspection & test all D/S/Cs Q1, Q2 – individual reports complete, lab-wide roll up summary in progress
- Scientific Tech Publ / editorial review Q1 – report delivered
- EVMS surveillance Q2 – final report delivered
- Records management Q2, Q3 – reports delivered
 - Roll up in progress
- OQBP V&V for closed assessment CAPs all D/S/Cs Q3 – reports in review
 - No issues found
- M&TE all D/S/Cs 2 Large x-cutting Q3, Q4 – in progress

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QA Assessment Results to Date

- ◆ OQBP Assessment FY2011 Results at a Glance
 - ❖ Inspection & test all D/S/Cs Q1, Q2 – 3 Findings
 - 2 segregation of nonconforming material
 - 1 inspection documentation
 - ❖ S/CI – 6 Findings
 - Not fully implemented (awareness, following procedures)
 - ❖ M&TE – 2 Findings to date
 - ❖ 20 Observations with recommendations for improvement
 - Documentation & records, infrastructure, work control, etc

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Science / Project QA Assessment Status

◆ Science / Project QA Assessments & Status

- ❖ Science As-Is baseline - final report delivered to AD for Research
 - No CAPs
 - Program, & Projects (Minerva, MINOS, Muon Accelerator, D0, Lattice QCD)
- ❖ Scientific Publication - final report delivered to AD for Research
 - One CAP
 - 14% of publications assessed non-compliant
- ❖ EVMS NoVA - - final report delivered to Head, OPMO
 - 8 CARs, 5 CIOs re EVMS & ANSI compliance

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QA Implementation - CAPs

- ◆ Corrective & Preventive Action tracking
 - ❖ DOE 2006 QA assessment
 - ❖ DOE 2009 QA assessment
 - ❖ OQBP led assessments (includes 2009 As-Is)
 - ❖ Ad hoc tracking improvement initiatives (ex: training)

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2009 DOE QA Concerns – CAP Status

- ◆ 4 New CAPs OQ-01/04/2010-01 thru -04
 - ❖ C1 & C2 Terms used in CAPA procedure – OQ-01/04/2010-01 – complete
 - ❖ C3 WSS/FESHM 1070 maintenance roles - OQ-01/04/2010-03 – complete
 - ❖ C6 Documentation of acceptance testing varies - OQ-01/04/2010-04
 - Inspection assessment – report delivered to FSO - complete
 - ❖ C7 & C8 Identify assessment criteria, define terms – OQ-01/04/2010-02
 - C7 FAM Mgmt. Assess. Procedure updated & posted - complete
 - C8 Other FAM updates from 2009 assessment - complete
 - Manual revised to incorporate H13 Clause requirements – complete
 - Independent Assess. Procedure updated & posted – complete
 - Lab-wide review – complete, next review ES&H/OQBP taskforce

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2009 DOE QA Concerns – CAP Status

◆ Existing As-Is CAPs

- ❖ C5 Fermilab Chief Engineer – OQ-05/22/2009-01 – IQA being modified, Integrated into new Office of Program & Project Support (OPPS)
 - OQBP, OPMO, new Office of Integrated Planning (OIP)
 - Planning & support, EVMS, OHAP, Engineering Manual
- ❖ C4 & SC1 (sig. concern) Inconsistent engineering practices, lack of Engineering Manual – OQ-05/22/2009-02 – complete
- ❖ C9 & C10 S/CI roles & disposition – OQ-05/30/2009-06 – complete
 - Other activities
 - S/CI Tags in inventory, Collected training samples, Training to be updated
 - FESHM update planned to reference the new tag
 - S/CI assessment along with Inspection & Test – renewed awareness

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2009 DOE QA Concerns – 4 CAPs from 2006 DOE QA assessment

- ❖ Criterion 2 Job specific training ITNAs – OQ-08/10/2009-01 – 09/31/2011
 - Initial system enhancements & testing complete more in progress
- ❖ Criterion 4 Document management – OQ-08/05/2009-01(a, b & c)
 - (a) EDMS (Teamcenter) est. completion MM/DD/YY
 - (b) CIO IT (Sharepoint) est. completion MM/DD/YY
 - (c) COO (policy, process) est. completion MM/DD/YY
- ❖ Criterion 4 Records management – OQ-08/05/2009-02 – complete
 - Handbook, procedures, training – complete 01/19/10
 - Lab-wide assessment – complete
 - summary rollup in progress
- ❖ Criterion 8 Calibration – AD-05/07/2009-03 - **complete**

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Other QA Activities

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QA Implementation – Other Activities

- ◆ Improved Integration with ES&H Management System
 - ❖ ES&H/OQBP task force (SSOs & QA Mgr)
 - Updating FESHM chapters & QA RCA & CAPA procedures
 - Next Fermilab Assessment Manual (FAM)
- ◆ New Online Assessment Program Training – tbd from above
 - ❖ Draft created
 - ❖ QAR subteam created FAQ's, posted on OQBP website
- ◆ Improved S/CI Online Training - tbd

Quality Assurance Program Challenges

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QA Implementation – Challenges

- ◆ Software, frESHTRK versus Vector – Reported to CIO -> Sharepoint
 - ◆ Working on Sharepoint test server, await production site
- ◆ Graded Approach
 - ◆ COO considering alternatives
- ◆ Timely implementation of some CAPs
- ◆ Maintenance of consolidated schedule - resources
- ◆ Aggressive QA assessment schedule – partially mitigated 2012-2013
- ◆ QAR turnover (TD reassigned, ES&H retired, PPD?)

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QAEs

◆ FSO OQBP Joint Activities

- ◆ Next quarterly IQA brief mid Oct 2011
- ◆ Next FSO DOE QA assessment Q4 FY2012
 - HSS versus FSO - DOE O 414.1D versus O 414.1C
 - Logistics, criteria, scope, impact 414.1D etc
- ◆ Other meetings?
 - SMART database QA items - tbd

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IQA Implementation

Questions?

Contractor Assurance Implementation Status

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Contractor Assurance Short Term Upcoming Events

- ◆ FRA CAS Steering Committee Assessment – June 12-15, 2011
 - ❖ Results not positive
 - ❖ New Task force convened by Pier, Chair Bob Kephart
 - QA Management System inputs delivered (model for others?)
 - OQBP continues to provide work products as requested

- ◆ DOE Peer Review of Contractor Assurance Program – August 2011

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CA Implementation

Questions?